

Progress in Johne's Disease Program Development

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Although the road to Johne's disease control and eradication for US dairies is destined to be a long one, great strides forward have been achieved over the last several years. Consider that this disease was first recognized over a century ago, and was found in dairy cows in this country by the early 1900's. A brief history of what has been done to control JD from then until now may be useful in providing some perspective and encouragement as the dairy industry now gears up to fight this problem.

Where was JD control in 1996?

For more than 90 years following the first reports of JD in US cattle, very little progress was made toward developing a national, industry-wide approach to control of the problem. During that time numerous individuals, including producers, researchers, and government officials sounded the alarm that JD represented a significant threat to the dairy (and other livestock) industries. Lacking any real consensus that this infectious problem was important, however, efforts in research and control were poorly funded, poorly coordinated, and locally, rather than nationally applied. Some efforts to control the disease through the 1960's and 1970's included quarantines that were not enforceable, and policies that effectively punished producers whose herds were diagnosed as infected. Such policies produced a strong impression that it was better to ignore the disease than to recognize it, and thus did more harm than good. Over many years various failed approaches to JD control encouraged ignorance and inactivity by producers and veterinarians alike.

This situation began to change in the mid 1990's, and progress in the development of control programs and strategies has been accelerating since then. In 1995 the National Johne's Working Group (NJWG) was formed as a subcommittee within the United States Animal Health Association (USAHA). This working group has approximately 70 members and includes representatives from government agencies, animal agricultural organizations, academic institutions, and professional organizations. The NJWG established several objectives for its work, but premier among them was to enhance development and implementation of the strategy for a Johne's disease control & herd certification program. The working group has provided a forum for building consensus among its members, to begin coordinating the many activities needed to tackle the challenge of JD control. Because the membership of the working group represents so many diverse stakeholders, progress has been made on many fronts over the last 8 years.

The national survey of the dairy industry conducted by the USDA:APHIS National Animal Health Monitoring System (NAHMS) Dairy '96 study provided our first national view of the extent of JD infection in the US dairy industry. This study showed that the disease was distributed throughout the entire dairy cow population, not just one or more regions of the country, and that the problem was more costly to producers than previously recognized. The Dairy '96 study also showed that dairy producers were not well informed about the disease, and thus were ill prepared to deal with it effectively.

What has changed since 1996?

Since the development of better communication about the needs for JD control in this country, and since the findings of the NAHMS Dairy '96 survey, great strides forward have been made on many fronts. Consensus of many parties was that a JD control program needed to be voluntary, driven by and for producers, rather than mandated and enforced by a government agency. A proposal for a voluntary Johne's disease "status" program for cattle, that effectively designates herds that have low risk of having JD, and that utilizes inexpensive blood tests, was approved by USAHA in 1998. The guidelines for this program have been adopted by the USDA to serve as the model for programs in each state. Similarly a voluntary JD control program has been approved and promoted as a model for states to implement.

The first commercially available, inexpensive blood test for JD was approved for use in 1993. Since then at least 7 different companies have produced and promoted new tests for JD. Research into newer and improved testing has been ongoing and accelerating. The future holds great promise for better and more rapid detection of infected animals. Research investments both by private industry and government agencies has continued to increase over the last 5 years.

Development and conduct of a voluntary, producer-driven program requires that producers and their veterinarians are knowledgeable about the disease and its detection and control. Educational efforts by a diverse group of organizations have been very successful to this end. The findings of the recent NAHMS Dairy 2002 survey showed vast improvement of dairy producer familiarity and knowledge about JD. Whereas in 1996 only 17% of dairy producers claimed working knowledge of JD and less than half were familiar with the disease, the 2002 survey showed that almost 90% of producers were familiar or knowledgeable. Information has been distributed by producer groups, the producer-oriented press, veterinary organizations, the USDA, and directly from the NJWG. There are now several informative websites that producers can visit to get more information. Two of these sites are that are especially helpful are the Johne's Information Center at <http://johnes.org/> and the USAHA, NJWG website at <http://www.usaha.org/njwg.html>

Perhaps the most significant change in the last 5 years has been the improvement in state JD control efforts. Every dairy producer should take the time to become familiar with their state program. Following the national recommendations, 32 of the 50 states have now developed a State Johne's Disease Advisory Committee. This committee is meant to represent producers, as well as others such as university and state veterinary office personnel, who must work together to establish an effective state program. This committee helps establish a program that can work for its represented livestock groups. Involved states have also made progress toward improving diagnostic laboratory capabilities for identifying JD infection.

The Farm Bill passed last year, for the first time established significant federal funding to support JD control efforts. More than \$20 million were committed to this end, distributed

towards research, improvement of laboratory diagnostic procedures, and support of state program efforts. Each state with an established JD control program was awarded substantial funding to assist its efforts, while states without programs received lesser funding to help develop a program. Funding has also been provided to monitor numerous herds throughout the country and track progress in JD control. These 'demonstration herds' will hopefully provide better information about those control procedures that prove most effective in the fight against this problem.

What's going on in Colorado?

As you will know from previous Colorado Dairy News articles, the Colorado Johne's Advisory Committee was formed several years ago and worked to develop a Colorado Voluntary Johne's Disease Control Program. This program was approved for the state in the summer of 2002. In January of 2003 the first training session was held for practicing veterinarians to become certified for working with herds and enrolling them in the Colorado program. Because our state had developed these components of a JD program, it was eligible to receive \$150,000 in federal funding to assist implementation and conduct of program activities. A plan for using these funds to the best advantage of the state's producers has been devised, to be implemented by the state veterinarian's office.

In September, a second veterinary certification program was conducted. Therefore, most likely your herd veterinarian has been certified and can participate in enrolling herds in the program. There are 3 phases to the Colorado program – education, risk assessment/management planning, and testing for herd status. Producers can enroll in the first 2 phases with virtually no expense, and these steps should be very useful in helping you make the most effective management decisions. Testing can be an important part of JD control, but is not required for program participation. Some of the federal funding awarded to Colorado will be used to support education and risk assessment activities. You should contact your herd veterinarian or the state veterinarian's office to inquire more about these activities. Dr. Ron Ackerman is the state Designated Johne's Coordinator, and he can be reached at 303-239-4168.

Take advantage of the opportunity to participate in the program. It is designed to work to your benefit.